

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

## PCT

To:

KADOR & PARTNER

Corneliusstrasse 15

80469 Munich

ALLEMAGNE

### NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(PCT Rule 71.1)

Date of mailing  
(day/month/year)

06.07.2005

Applicant's or agent's file reference

K 50 456/3mz

#### IMPORTANT NOTIFICATION

International application No.

PCT/EP2004/009491

International filing date (day/month/year)

25.08.2004

Priority date (day/month/year)

27.08.2003

Applicant

BOREALIS TECHNOLOGY OY

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international  
preliminary examining authority:



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# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference K 50 456/3mz	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/EP2004/009491	International filing date ( <i>day/month/year</i> ) 25.08.2004	Priority date ( <i>day/month/year</i> ) 27.08.2003	
International Patent Classification (IPC) or national classification and IPC C08L23/08			
Applicant BOREALIS TECHNOLOGY OY			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> <i>sent to the applicant and to the International Bureau</i> a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand  25.02.2005		Date of completion of this report  06.07.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer  Bergmans, K Telephone No. +31 70 340-4189	



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

10/569334

International application No.  
PCT/EP2004/009491

**IAP20 Rec'd PCT/PTO 21 FEB 2006**

**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
    - ☐ international search (under Rules 12.3 and 23.1(b))
    - ☐ publication of the international application (under Rule 12.4)
    - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-17 as originally filed

**Claims, Numbers**

1-13 as originally filed

**Drawings, Sheets**

1 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/EP2004/009491

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-13
Inventive step (IS)	Yes: Claims	
	No: Claims	1-13
Industrial applicability (IA)	Yes: Claims	1-13
	No: Claims	

2. Citations and explanations (Rule 70.7):

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/EP2004/009491

**IA20 Rec'd PCT/PTO 21 FEB 2006****Re Item V****Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****Novelty (Art. 33 (2) PCT)**

Document D1 (EP0393959) discloses a flame retardant polymer composition comprising an organic polymer e.g. ethylene-butyl acrylate copolymer, a silicone fluid or gum (2-8 %) e.g. polydimethylsiloxane, and an inorganic filler (15-50 %) e.g. calcium carbonate. The inorganic filler can be present in the composition in an amount of 15-50 % and has an average particle size between 0.5-2 microns. The polydimethylsiloxane is present in the composition in an amount of 2-8 %. Neither a hydroxide nor a hydrated compound is present in the composition. The composition is used in wire or cable applications. The subject-matter of claims 1-13 is not novel in the sense of (Art. 33(2) PCT).

The document D2 (EP1188793) discloses a flame retardant composition comprising a polycarbonate, an inorganic filler e.g. calcium carbonate and an anti-drip agent. Optionally, the polycarbonate can be blended with an other thermoplastic resin like a polyolefin e.g. polypropylene or polyethylene in a content between 1-40 parts by mass (page 8 line 25). The anti-drip agent can be e.g. a nano-filler or a polydimethylsiloxane, and is present in the composition in an amount up to 5 part by weight based on 100 part of the composition. The composition further comprises an inorganic filler e.g. calcium carbonate, present in an amount of 2-60 parts by weight based on 100 parts of the composition and characterised by a particle size of 0.2-20 microns. The subject-matter of claims 1-12 is not novel in the sense of (Art. 33(2) PCT).

**Inventive step (Art. 33(3) PCT)**

Document D1 discloses a flame retardant polymer composition comprising an organic polymer e.g. ethylene-butyl acrylate copolymer, a silicone fluid or gum (2-8 %) e.g. polydimethylsiloxane, and an inorganic filler (15-50 %) e.g. calcium carbonate.

The subject-matter of present claim 1-13 differs from this prior art in the aspect ratio of the inorganic filler.

There is no evidence found in the present application in relation to the closest prior art (document D1) showing that the distinguishing feature being the aspect ratio of the organic filler leads to a technical effect.

The problem to be solved by the present invention may therefore be regarded as providing a further composition.

The solution as proposed in the present application cannot be considered as involving an inventive step (Art. 33 (3) PCT). Inorganic fillers e.g. calcium carbonate having a particle size smaller than 0.5 micron and an aspect ratio of below 5 are known from the prior art (document D3 EP1245730).

#### **Re Item VII**

#### **Certain defects in the international application**

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in document D2 is not mentioned in the description, nor is this document identified therein.

The specification for an European application should be capable of being understood without reference to any other document. The expression "hereby incorporated by reference" found in the description is therefore not according to the EPC requirements.